

ABSTRACT

In accordance with the preferred embodiment of the present invention, a method of and system for improving temporal consistency of an enhanced signal representative of at least one frame using a sharpness enhancement algorithm with an enhancement gain are provided. The method comprises the steps of: receiving the enhanced signal comprising at least one frame, obtaining an enhancement gain for each pixel in the frame, retrieving an enhancement gain value of each pixel in a reference frame from a gain memory using motion vectors, identifying if the frame is an I, P or B frame type and determining an updated enhancement gain for an I frame type by calculating a gain map for use in the sharpness enhancement algorithm. The updated enhancement gain of each pixel is equal to enhancement gain previously determined for use in the sharpness enhancement algorithm. In addition, the method includes storing the updated enhancement gain to gain memory, and applying the updated enhancement gain to the sharpness enhancement algorithm to improve temporal consistency of the enhanced signal. The method may further comprise the step of further improving the updated enhancement gain by applying a motion adaptive temporal IIR filter on the updated enhancement gain.